

## PREVENTING ATTACKS IN A DATA PROCESSING SYSTEM

### ABSTRACT

A method and apparatus for facilitating reduction in  
5 successful attacks on a monitored data processing system, such as  
a host computer. An intrusion detection system comprises a host  
or application based sensor for detecting code based intrusions  
with a relatively low false-positive rate. Malicious code strings  
related to a detected intrusion are identified, extracted and  
10 forwarded to a pattern filter located in the monitored data  
processing system to prevent further intrusions using said  
malicious code strings. The malicious code strings may be  
forwarded to a response server for assembling sets of similar  
malicious code strings for which signatures are generated to  
15 permit identification of all malicious code strings contained in  
a set. The generated signatures are then distributed to monitored  
and/or monitoring systems of a protected network to prevent  
further intrusions using the malicious code strings and  
variations thereof.

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